

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           Claim 1 (currently amended): A magnetron, in which  
2       both a strap-engaging concave portion for joining a strap  
3       ring and a strap-inserting concave portion for inserting  
4       therethrough the strap ring in a non-contact manner are  
5       provided on an upper edge and a lower edge of each of anode  
6       vanes in ~~such~~ a manner that the strap-engaging concave  
7       portion and the strap-inserting concave portion are  
8       positionally shifted from each other along a radial  
9       direction of an anode tubular body; the anode vanes  
10      arranged along a circumferential direction are electrically  
11      connected to each other ~~every one vane~~ by any one of a  
12      small-diameter strap ring and a large-diameter strap ring  
13      coaxially arranged with respect to a center axis of the  
14      anode tubular body, is joined to the strap-engaging concave  
15      portion; and a microwave radiating antenna passing through  
16      an output-sided magnetic piece in a non-contact manner is  
17      joined to one anode vane among the ~~plural~~ anode vanes,  
18           wherein, in such a case that a radial dimension of an  
19      outer circumference of the small-diameter strap ring is s1  
20      a radial dimension of an inner circumference of the large-  
21      diameter strap ring is s2 a radius of a circumference

22 inscribed to tip portions of the anode vanes is  $a$  and a  
23 radius of a central flat portion of the output sided  
24 magnetic piece located in ~~the~~ a vicinity of each of the  
25 anode vanes is " $R_p$ ", ~~the~~ values of  $R_a$ ,  $R_{s1}$ ,  $R_{s2}$ ,  $R_p$  are set  
26 in ~~such a~~ manner that ~~the~~ satisfies both following formulae  
27 (1) and (2) ~~can be established~~:

28  $1.85R_a \leq (R_{s1} + R_{s2})/2 \leq 1.96R_a \quad \dots (1)$

29  $R_{s1} < R_p < R_{s2} \quad \dots (2).$

1 Claim 2 (currently amended): A magnetron according to  
2 claim 1 wherein a depth dimension of the strap-engaging  
3 concave portions provided on the ~~upper/lower~~ upper and/or  
4 lower edges of each of the anode vanes is set in ~~such a~~  
5 manner that the strap rings engaged with the strap-engaging  
6 concave portions are sunk inwardly with respect to the  
7 ~~upper/lower~~ upper and/or lower edges of each of the anode  
8 vanes.

1 Claim 3 (original): A magnetron according to claim 1  
2 wherein an interval along an axial direction between an  
3 output-sided end hat provided on one edge of a cathode and  
4 the upper edge of each of the anode vanes is set to 0.2 to  
5 0.4 mm.

**Amendments to the Drawings:**

The attached sheets of drawings includes changes to Figs. 10, 11, 12(a)-(e) and 13. These sheets, which includes Figs. Figs. 9, 10, 11, 12(a)-(e) and 13, replaces the original sheets including Figs. 9, 10, 11, 12(a)-(e) and 13. Figs. Figs. 10, 11, 12(a)-(e) and 13 have been labeled as "Prior Art".

Attachment: Replacement Sheets (3 total)